

REMARKS

Claims 1 and 24-31 are currently pending. Claim 1 has been amended. No new matter has been added. Reconsideration of the above-identified application in light of the above amendment and the following remarks is respectfully requested.

Claim 1 has been amended to recite that “the microporous surface layer [surrounds] the ceramic internal layer, in all regions except where the substrate is in contact with the capillary suction dryer.” Support for this amendment is found throughout the Specification and Drawings, as filed, for example at page 2, lines 22-25.

Claim 1 has been further amended to recite that “the recess areas [extend] along a longitudinal axis of the filter element opening only to one end of the filter element....” Support for this amendment is found throughout the Specification and Drawings, as filed, for example in Figure 1, and page 3, line 30- page 4, line 5. Additionally, the ability to create a core of any shape desired is implicit in the use of a lost core and is also set forth, for example, at page 5, lines 3-6.

Claim 1 and Claims 24-31 have been rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 4,981,589 to Hindström et al. (“Hindström”).

Claim 1, as amended, recites a filter element to be used in removal of liquid from solids containing material, in conjunction with a capillary suction dryer, comprising: a ceramic internal layer having at least two hollow recess areas for liquid flow, the recess areas extending along a longitudinal axis of the filter element opening only to one end of the filter element, the ceramic internal layer being made of at least one sintered substrate which continuously surrounds

the at least two hollow recess areas; and at least one essentially continuous, separately sintered ceramic microporous surface layer having a pore size under 5 micrometers, supported by the ceramic internal layer, the microporous surface layer surrounding the ceramic internal layer, in all regions except where the substrate is in contact with the capillary suction dryer.

Hindström concerns a filter construction and a method, in particular for capillary suction dryers. The filter construction of Hindström, in the embodiment of Figure 1, comprises a first filter material layer of a ceramic material (element 1 in Figure 1), a second ceramic filter material layer (2), connected with the first layer and surrounding a third layer (3) which is made of a granular ceramic material (See Hindström, col. 3, lines 38-39 and Figure 1). The first filter material layer acts as the filtering layer proper, and the second and third layers act to help support the construction. As such, this embodiment of Hindström cannot teach or suggest “at least two hollow recess areas for liquid flow,” as recited in Claim 1, as amended. This embodiment also does not teach or suggest “recess areas extending along a longitudinal axis of the filter element opening only to one end of the filter element,” or “the microporous surface layer surrounding the ceramic internal layer, in all regions except where the substrate is in contact with the capillary suction dryer,” as currently claimed by Applicants in amended Claim 1.

The embodiment of Hindström shown in Figure 3 is an extruded plate. Suction spaces (10) are formed in the plate. Being extruded, this plate must have a constant cross-section (illustrated in Figure 3). Accordingly, these suction spaces must necessarily pass from one end of the plate to the opposite end. As such, this embodiment of Hindström cannot teach or suggest

“recess areas extending along a longitudinal axis of the filter element opening only to one end of the filter element,” as currently claimed by Applicants in amended Claim 1. Further, the embodiment of Figure 3 of Hindström does not teach or suggest “the microporous surface layer surrounding the ceramic internal layer, in all regions except where the substrate is in contact with the capillary suction dryer,” particularly because of the aforementioned second end formed with open recess due to the extrusion process.

For at least the foregoing reasons, Hindström does not teach or suggest an embodiment (or method of manufacture) for a filter element that comprises “at least two hollow recess areas for liquid flow,” “recess areas extending along a longitudinal axis of the filter element opening only to one end of the filter element,” as well as “the microporous surface layer surrounding the ceramic internal layer, in all regions except where the substrate is in contact with the capillary suction dryer.”

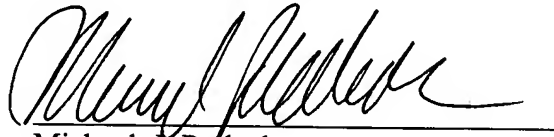
Accordingly, Applicants respectfully submit that independent Claim 1, and all claims depending therefrom, define patentable subject matter over Hindström. Withdrawal of the rejection applied to former Claims 1 and 24-31 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Hindström is respectfully requested.

Appln. No. 10/613,603
Amendment dated April 16, 2004
Reply to Office Action of November 19, 2003
Attorney Docket No. 6009-4599US1

CONCLUSION

In light of the foregoing, Applicants respectfully submit that all claims, as currently presented, define patentable subject matter over the art of record, alone or in combination, and that this application is in condition for allowance. An early allowance of all claims is earnestly solicited.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Michael J. Pollack", written over a horizontal line.

Michael J. Pollack
Registration No. 53,475

Dated: April 16, 2004

Correspondence Address:

MORGAN & FINNEGAN, L.L.P.
345 Park Avenue
New York, NY 10154-0053
(212) 758-4800 Telephone
(212) 751-6849 Facsimile

Israel Blum
Registration No. 26,710